

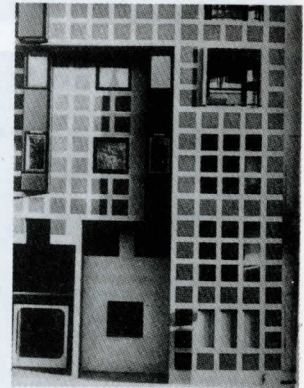
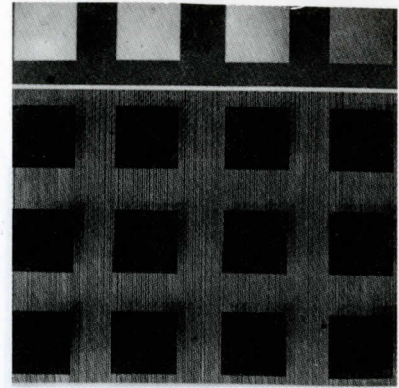
# On Painting and Architecture

Zainab Faruqui Ali

Paintings-hung from the living room walls or displayed in the superbly-lit modern art museums, give us joy, take us to far away places, stir our memories. Their colours create mood, compositions evoke thoughts. From the very beginning of the history, paintings have provided stimulus to many great architecture. Architects have always turned to paintings and architecture of the masters for inspiration. Paintings have dictated architecture, we have compared architecture with painting, and also architects have used paintings for their presentation. Many a times paintings have led the way of architecture, and those bold brush strokes, pale water colours or majestic sketches have guided architects in developing their ideas. Many times architects have adopted the style of painting as their presentation technique. Michael Graves' superb drawings exemplify this. Otto Wagner, Stanley Tigerman or Aldo Rossi very often treat their architectural presentation as a painter would paint on his canvas. (fig.1)

The great Italian maestro Michelangelo introduced a dynamic space, instead of static emptiness, shown in perspective in his painting 'The Last Judgment'. This spatial conception was achieved by the same master some years later in architecture in the Capitol, Rome. And throughout the artistic period of Renaissance, paintings were in advance to architecture in expressing the Renaissance feeling.

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## Abstract

Architects have always turned to paintings for inspiration. They have compared architecture with paintings, and also have used paintings for their presentation.

The bold 'Carceri' etchings of G. B. Piranesi have influenced the French visionary architects Boullée and Ledoux, English neoclassicist John Soane, modern master L. I. Kahn, and many more. The interplay of planes of the pictures of Japanese paintings have appeared in the asymmetrical spatial arrangement of Wright's prairie houses. Again, Mies' works after 1923 display influences of paintings of that time. Corbusier painted vigorously from 1917 to 1925; and all the pushed and pulls, the tensions of the plans, the free space, the mobility, the weightlessness of his purist villas echo his purist paintings.

Hence, at no time paintings failed to produce spirits to those who were occupied with architectural conceptions.



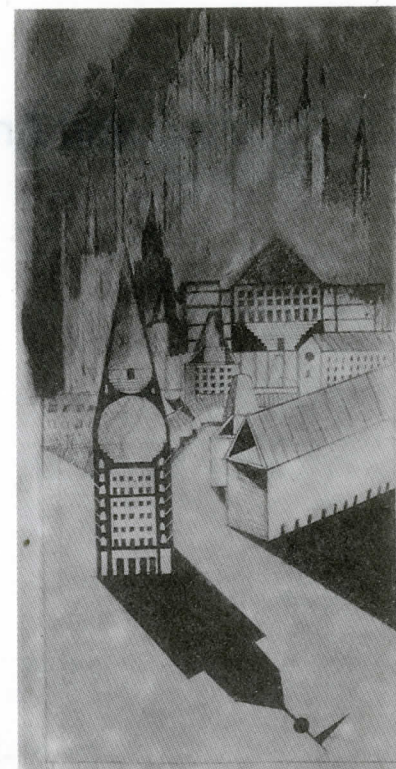
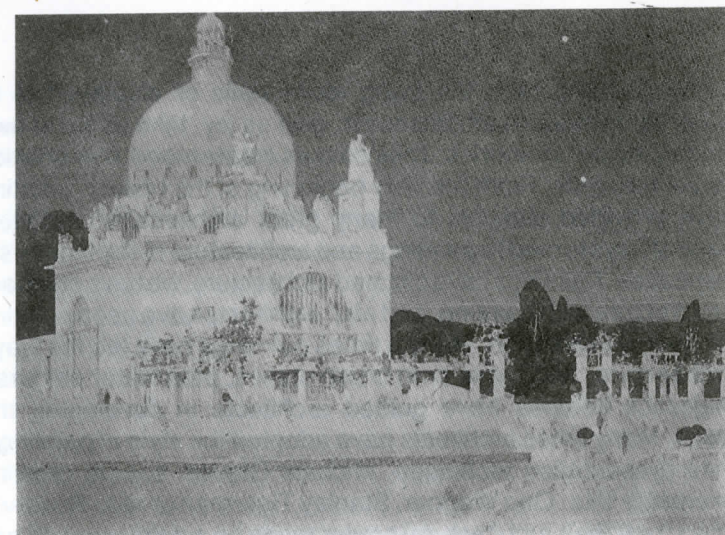
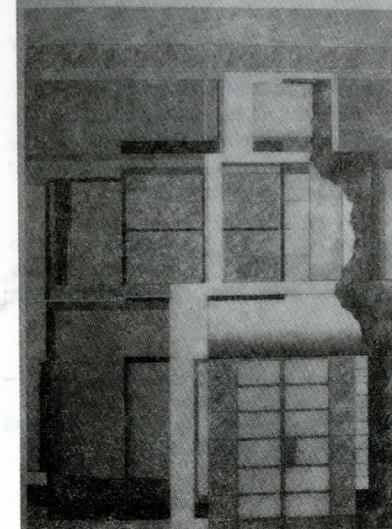
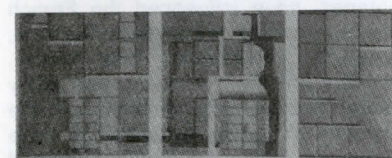
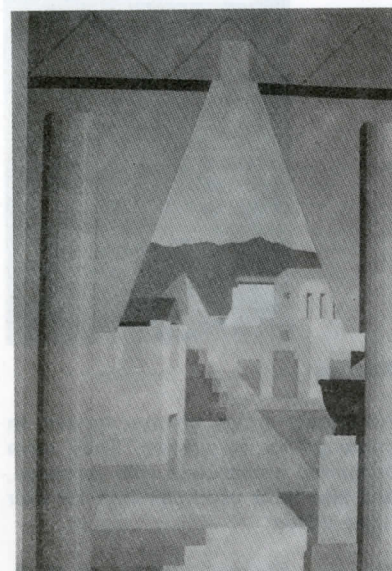


FIGURE 1

## Piranesi

In the mid 18th century, the introduction of Romantic Classicism in Europe was geared by a Scottish painter, a Venetian painter-etcher and a German Archaeologist. Certain aspects of Romantic Classicism were boldly presented by the 'Carceri' or prison series etchings of G. B. Piranesi. In 'Carceri' drawings, architectural fantasy strains and tries to break the boundaries of human perception. With his multiple perspectives and superb management of light, Piranesi was working towards mastery of spatial ambiguities in art. Lines in his pictures move and soar, stirring our imagination, making us wonder and filling us with sadness ad a sense of mystery (fig.2).

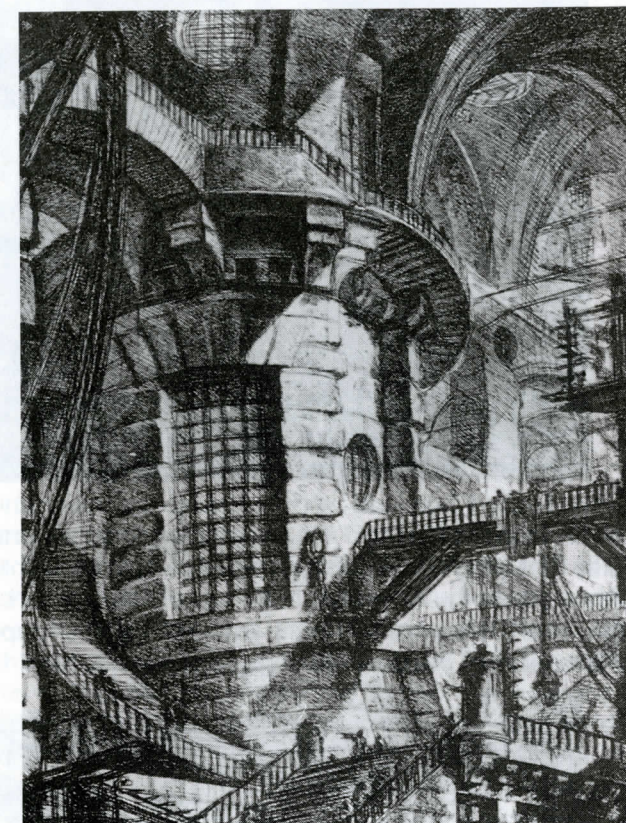
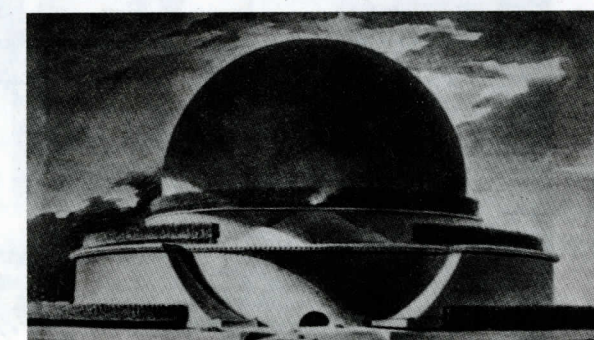


figure 2

French visionary architects like Boullee and Ledoux constantly derived influences from Piranesi. Ledoux's work shows presence

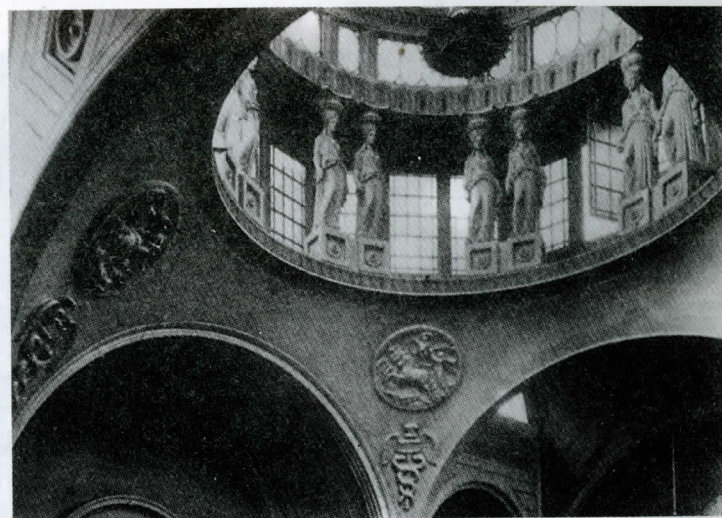
figure 3







of Piranesian touches of visual drama (fig 3). In England, romantic classicist John Soane's Bank of England buildings and his own museum carried the spatial and decorative innovations of interiors of this period. In the Colonial Office of the Bank of England building in London the lighting of the dome-topped arched interior echoes similar effect of the Piranesian interior sketches (fig 4). Spanish art nouveau master Gaudi's Sagrada Familia in Barcelona point to the dream like forms of Piranesi. Coming to modern times, such influence can be observed in



Charles Moore's Piazza D'Italia's complex arrangement of arcades (fig.5). The carefully calculated spatial complexity with its dramatic lighting inside the Assembly building in Dhaka by L. I. Kahn may also recall the same effects created by the superimposed perspectives of Piranesi etchings

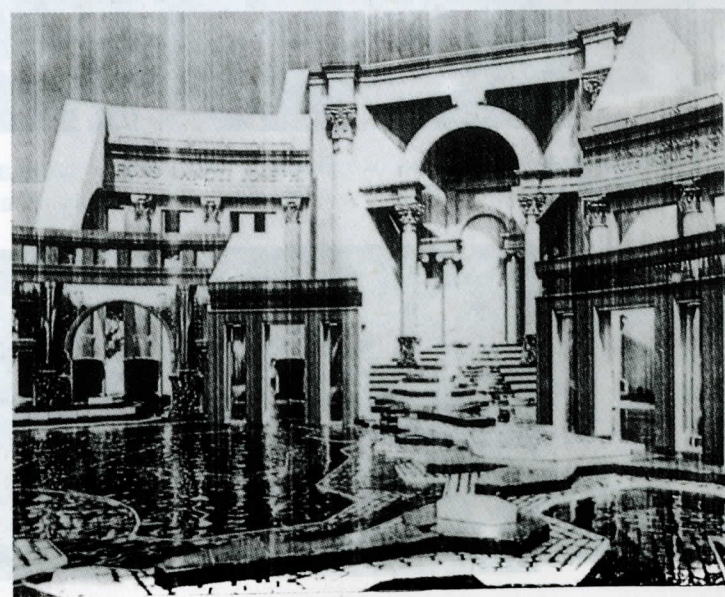
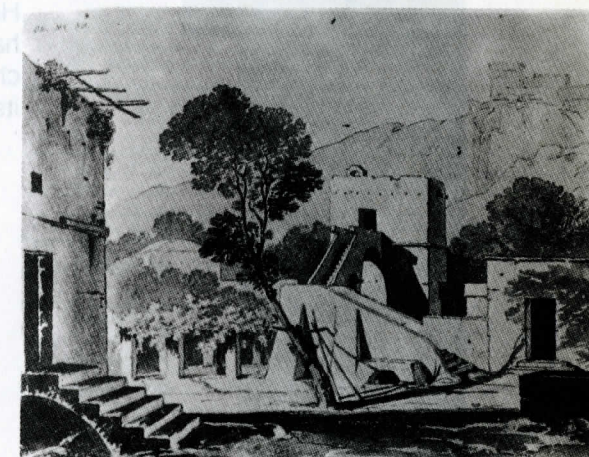


FIGURE 1

## Schinkel

Karl Friedrich Schinkel is ranked among the best-known romantic classical architects of 19th century. He is notable for his concern for the necessity of relating his buildings to their surrounding environment. His early 19th century proposals include harmonious and organised



urban environment for central Berlin. Schinkel himself was a painter before he became a theatre set decorator and eventually an architect. It is through his paintings that he developed a sense of proportion and total composition whose matured expression was delivered in his architecture (fig.6). A competent landscape painter, Schinkel spent many years painting for patrons and for himself. This occupation taught him to extract the essence of visual experience, to record in his sketchbook conformations of natural and man-made environments, and to construct in his paintings evocative scenes of a romantic world. Schinkel's unfailing skill in fusing logic and charm, order and variety is evident in his buildings of Potsdam which was based on fusing lightness and strength, clarity and elaboration into sublime and perfect colour schemes of his earlier age. T. Fontane once remarked that he painted like an architect and built like a painter.<sup>1</sup> The "malerische" character of his architecture would come not from decorative surfaces or other colouristic effects, but from an approach to the total environment of a building, the essential features of which he was assimilating and developing during his years as a painter. His interest in the relationship between nature and architecture was stimulated and sustained by exercises in fantasy landscapes which found its ultimate success in the Court Gardeners House at Potsdam (fig.7).

1. Pundt, H. G., *Schinkel's Berlin*, Harvard University Press, Cambridge, Mass. 1972; p 99

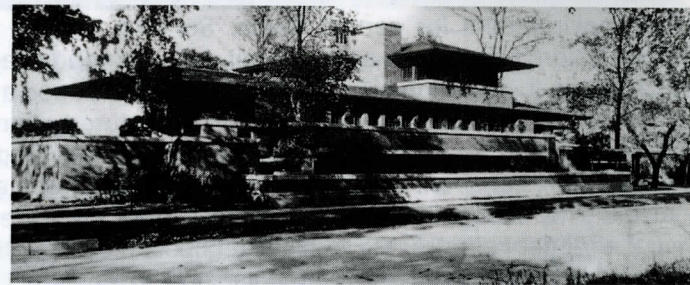
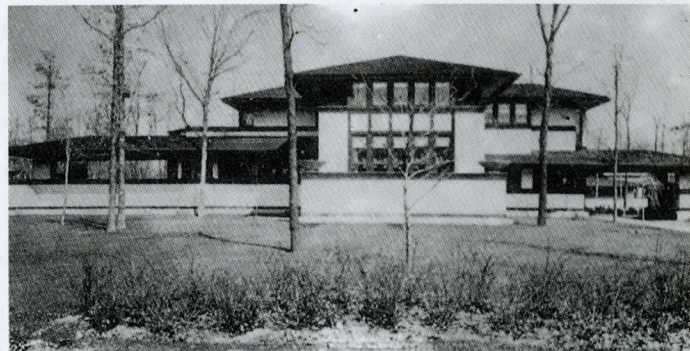
FIGURE 11 AND 12





## Wright

Modern master Frank Lloyd Wright was influenced by Japanese paintings. The interplay of planes in the pictures of Japanese prints have appeared in the asymmetrical spatial arrangement of his prairie houses (fig. 8). These houses also contain the same type of Japanese lightness and natural settings. The delicate proportions of the Hardy House, with its three levels poised in the side of a hill above lake Mendota, the elaborate but serene interweaving of lower and higher spaces and masses in the Coonley House; the clean progression and regression of light coloured planes in the Gale House are all examples of this subtle but definite influence. He believed that Japanese paintings contained the interior space harmony which penetrates the outward form and "is its determining character, that quality in the thing . . . that is its significance and its life for us"<sup>2</sup> (fig. 9).



V. Scully compared Wright's work with paintings by saying, 'Robie House combines Cezanne's reverence for the majesty of solid things and his recognition of the forces that pull at them with Picasso's fragmentation of solids into planes which move continuously through space' (fig. 10). His murals in the Midway Gardens in Chicago, called 'City by the sea' displays a complex non perspective composition of overlapping coloured circles. This design extended beyond the painted frame and even the architectural moulding, and in the process blends the pictorial with the structural (fig. 11). These techniques incorporate the advanced theoretical ideas at that time since Wassily Kandinsky overlapped circles in paintings in similar manner in about the same time.<sup>3</sup> By studying the prairie houses, we see that Wright varied the stained

glass windows from room to room and by changing the windows, he changed the colour, the quality and the play of light. Wright's most important single window designs were for the Avery Coonley Playhouse of 1912. The clerestory windows, contemporary with some of first European abstract paintings, have affinities with the later paintings of Piet Mondrian (fig. 12).

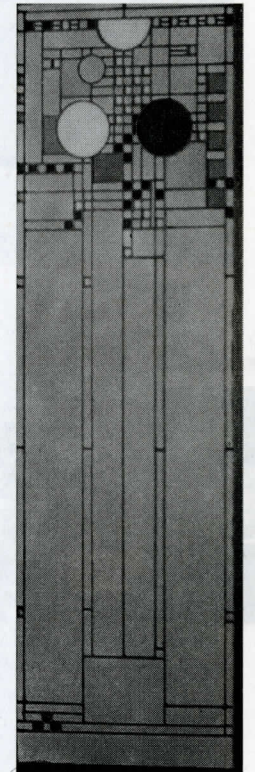
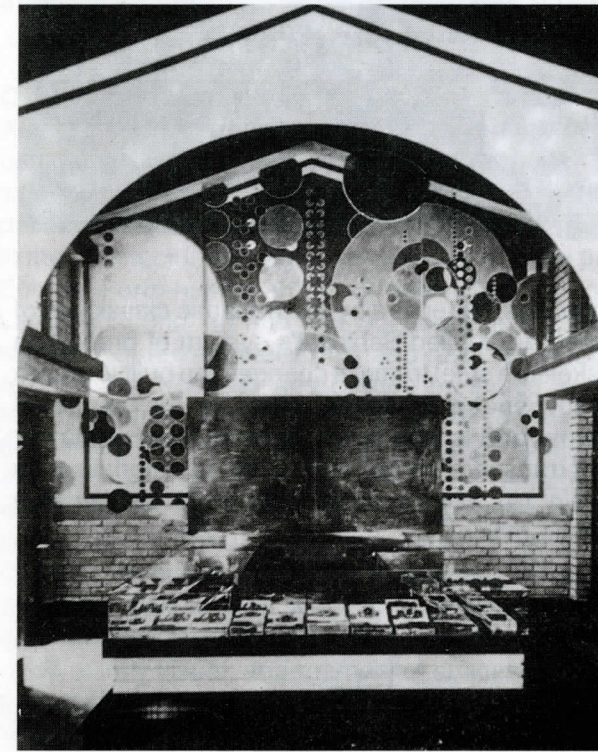


FIGURE 11 AND 12

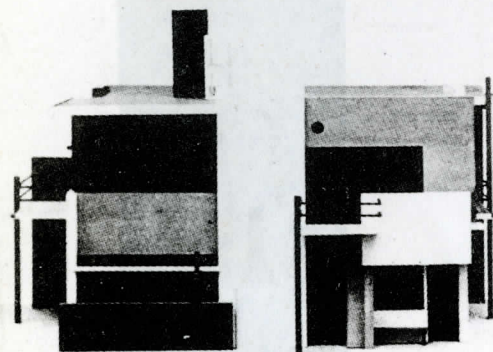
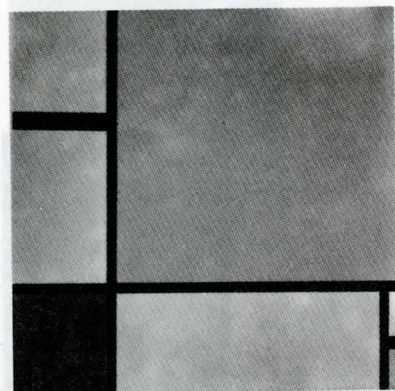
## De Stijl

The rhythmic patterns of sliding lines and planes which van Doesburg developed and Mondrian culminated around 1920, are visible in many of the later architects such as Rietveld's or Mies's interwoven arrangement of plastic masses. Mondrian claimed that he was seeking an abstract formulation which could merge both the continuity and the stability of modern times. The order created by his long, crossing lines, his tensely balanced proportions, and his rectangles of primary colours were the inspiration for planning, massing and elevation treatment of the "International style" architecture of the 20s and 30s. Theo van Doesburg and G. Rietveld grasped clearly the three dimensional aspect of such geometrical abstraction. Rietveld's Schroeder House was named

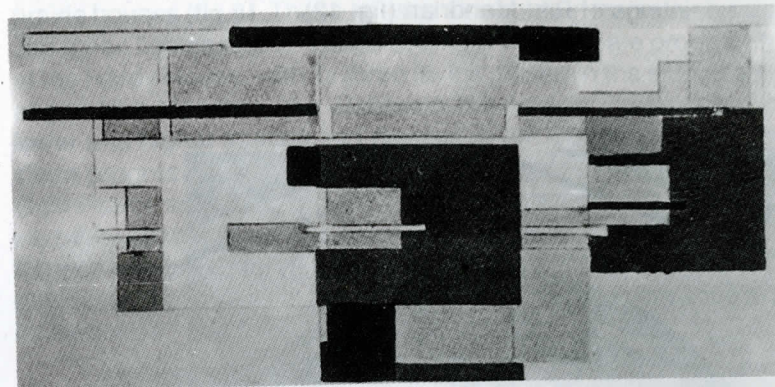
2. Hanks, D. A., *The Decorative Designs of Frank Lloyd Wright*, E. P. Dutton, NY. 1979; p7
3. Hanks; p 121



FIGURE 13



a cardboard Mondrian. The small rectangular house is composed of planes, horizontal and vertical, sometimes intersecting each other. The smooth surfaces are directly influenced by Mondrian paintings in both colour and composition like a visual music in touch with emotions<sup>4</sup> (fig. 13).



#### Mies

Mise van der Rohe was influenced by the romantic classicism of Schinkel, and when he applied Schinkel's system of proportion and order to the skeleton steel frame, it changed the built form into shifting planes suspended in space which is the image of suprematism. Farnsworth is also purely suprematism display or the architecture of transparency pointing to the dematerialisation of architecture<sup>5</sup> (fig. 14). Mies's works after 1923 display to a varying degree three major

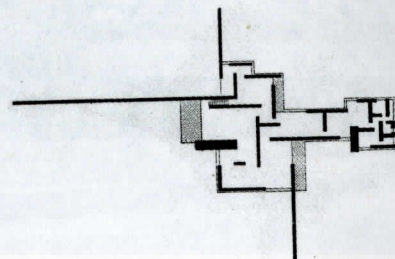


FIGURE 14

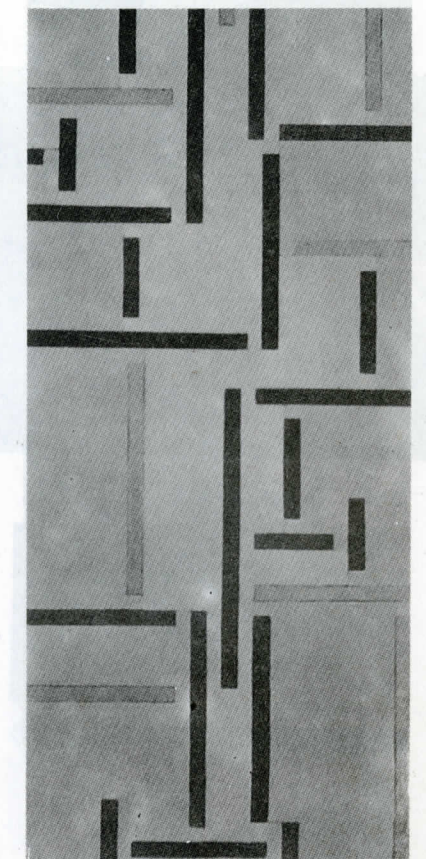
influences, the two of which were paintings of that time. -De Stijl and Kasimir Malevich's suprematism. It was suprematism that encouraged Mies to 'ultimately develop the free plan. Mies's project for a brick country house of 1923 shows influence of the De Stijl movement in the simplicity and clarity of plan. The pin-wheel plan allows the lines continuously outward and interrupts them rhythmically with other lines in a way expressed by van Doesburg in 'Rhythms of a Russian Dance of 1917<sup>6</sup> (fig. 15). Mies's European Master work, the German State pavilion or the Barcelona Pavilion at the Barcelona World Exhibition of 1929 displays

4. Curtis, W. J., *Modern Architecture since 1900*, Oxford Phaidon Press Ltd., 1987; p 93
5. Frampton, K., *Modern Architecture*, Thames and Hudson Ltd., London, 1985; p 232
6. Drexler, A., *Mies van der Rohe*, George Braziller, Inc., 1960.

horizontal centrifugal spatial arrangement that was subdivided and articulated by free-standing planes and columns. Contemporary photographs after restoration in 1986 reveal the inexpressible quality of its spatial and material forms. Certain displacements in its volume were brought about by creating images of the main bounding planes made of marble. Also the Tinian marble wall in its turn reflected the chromium plated steel mullions, and thus forming a suprematist composition<sup>7</sup> (fig. 16). Again, Malevich's 'White on White' expressing the non objectivity of universal space is very close to the 'almost nothing' concept of Mies van der Rohe's architecture.

#### Cubism

Architects who considered themselves modernists around the beginning of 20th century were generally associated with the influence of abstract art on architecture. This modern movement, descended from both Cubism and Futurism, filled a desperate gap in the architectural thought immediately after the first world war in Europe. Form-hungry architects banked on the work of Malevich, Lissitsky, Mondrian and van Doesburg, and extracted from it a reservoir of rectangular forms and rules for introducing them to one another. Picasso and Braque produced a visual language mixing abstract elements and parts of realistic elements, thus developing three-dimensional sense of forms within the two dimensional universe of the canvas. By representing the object from many angles gives movement to the viewer, who can move freely, may be only in thought, around the object (fig. 17). Before Cubism, the viewer was used to watching an object from single viewpoint. This idea of space when transformed to architecture gave spaces a new mobility. Instead of the traditional system of static, purely visual, arrangement of spaces composed in term of axes and symmetries, the architecture now became the sum total of complex experience of movement. An important transition of cubism into purism happened in France in the hands of Le Corbusier and Ozenfant. While Le Corbusier was working in 1908 in Paris with Perret, he would spend his lonely hours wandering around the museums watching the paintings of Cezanne and others. Corbusier and Ozenfant started using the combination of abstract forms with representational fragments and with spaces in tight layers in their paintings. The subject matter was everyday objects of the cafe table, the studio and the machine shop: guitars, bottles, and pipes were presented in their typical forms in a plastic composition. In his 'Still life' of 1920, outlines of bottle and guitar are reduced to simple geometric shapes and visual tension is achieved by overlapping of object (fig. 18). Same as Schinkel, painting improved Corbusier's sense of scale, proportion and composition. Corbusier painted throughout the time of 'L'Esprit Nouveau', from



7. Frampton, K.; p 165



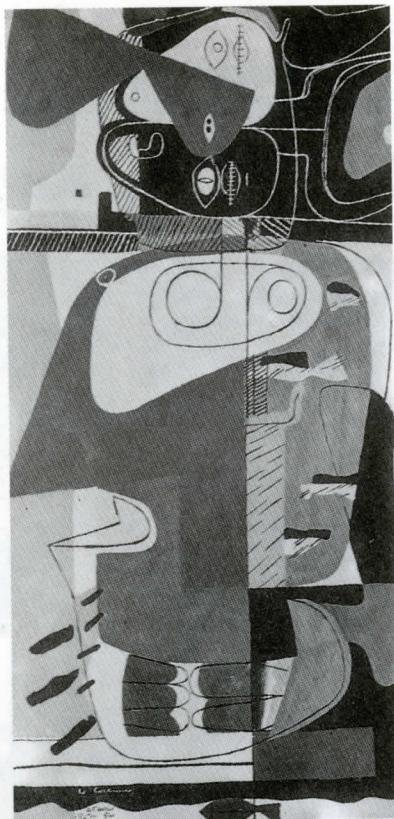


FIGURE 18

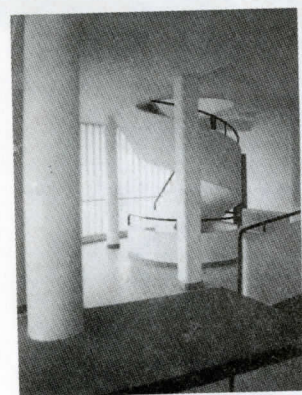
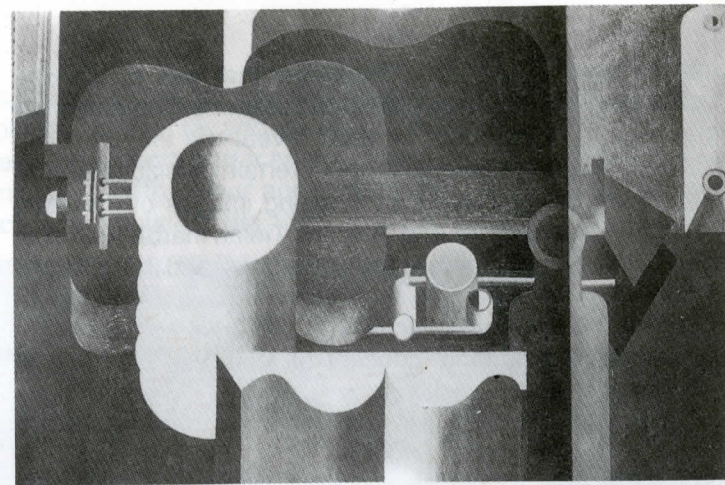
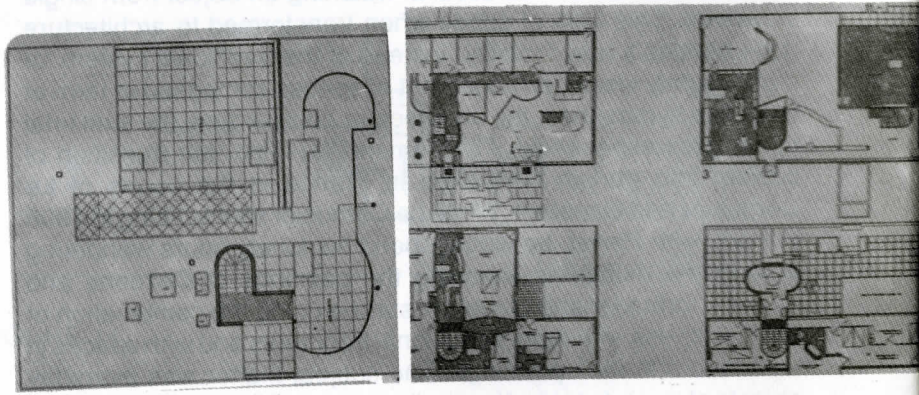


figure 19

8. Besset, M, *Le Corbusier*, Rizzoli Int. Publications, Inc., NY, 1976; p144



1917 to 1925, his Purist period. But in the process he was formulating his new concept of architectural form accentuated by love of pure shapes. The merging of contours, between the different objects and outlines points to the interpenetration of inner and outer space achieved later in his buildings. His carrier as a painter became important to him when he became Le Corbusier the architect, because it helped him with a laboratory of forms. All the pushes and pulls, the tensions of the plans, the free space, the mobility, the weightlessness of his purist villas echo his purist paintings (fig 19).



Without this "plastique" experimentation in painting which he dealt with his feeling and passion, Corbu probably would never have created the forms that appeared in his architectural work. In architecture, whether Corbu asserted the order-giving power of the right angle or developed a free system of organising spaces, he incorporated all of the contemporary theories on the composition of plastic space. From the geometric simultaneity of Cubism, the grid-space theory and to the dynamism of Kandinsky, Corbu assimilated them all in his work<sup>8</sup> (fig. 20).

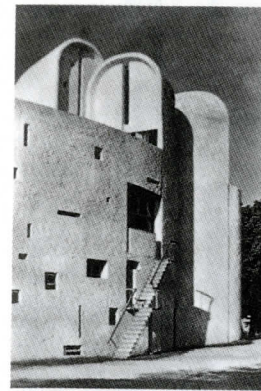
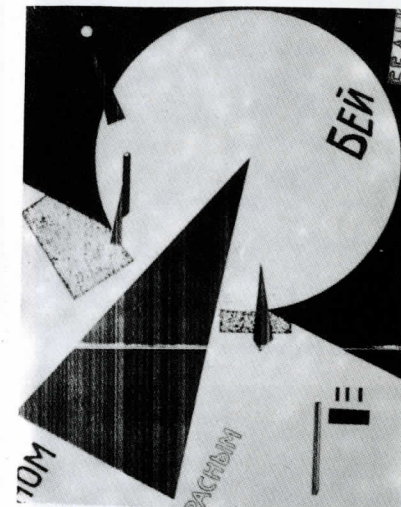


FIGURE 20



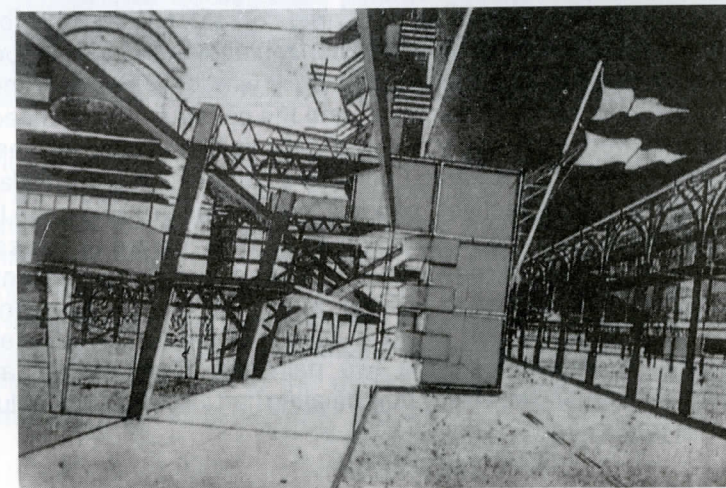
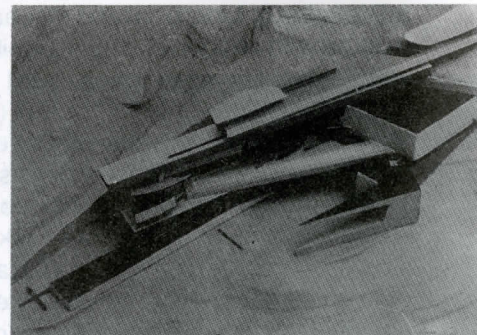
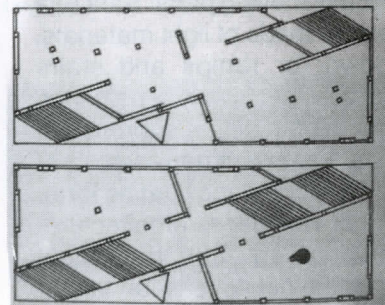
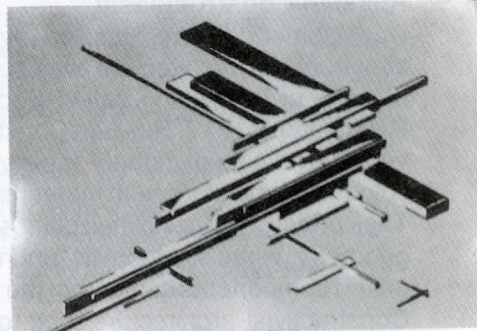
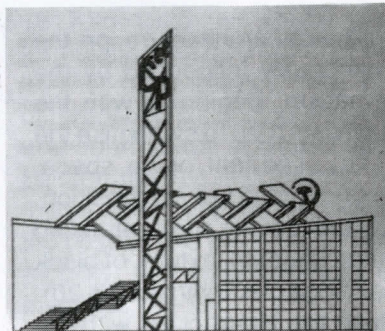
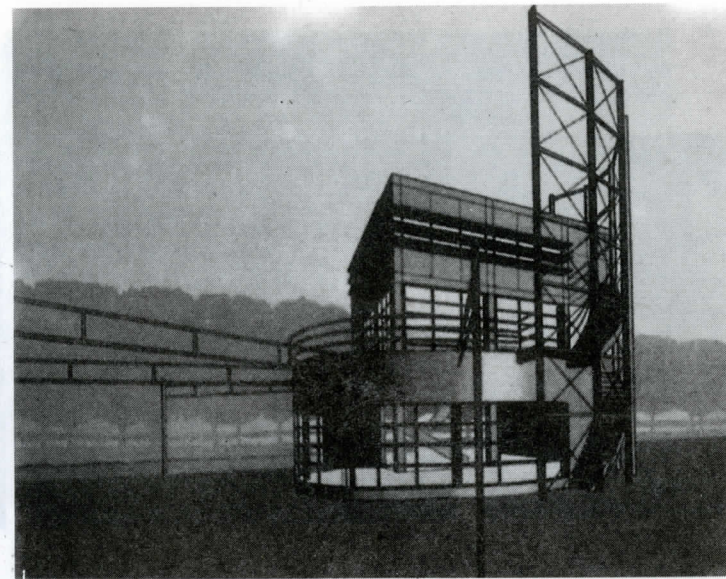
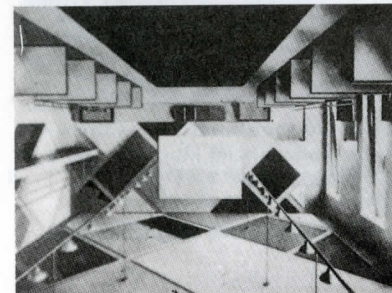
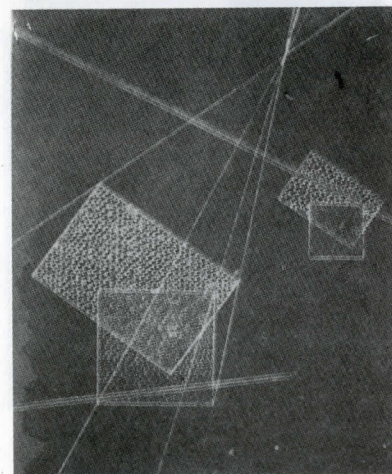
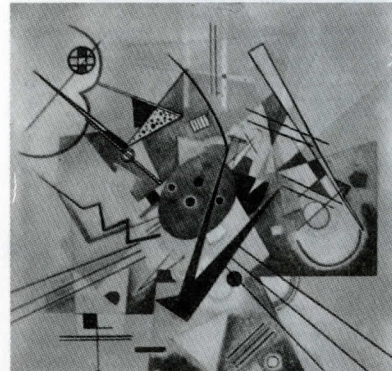
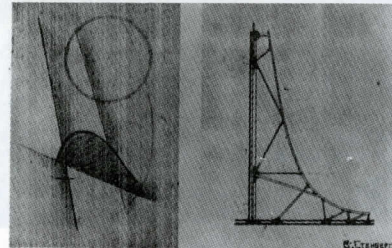
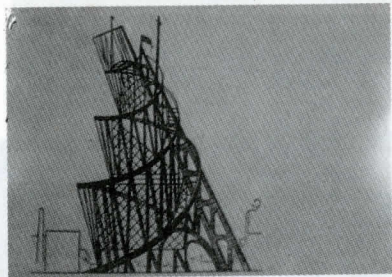
### Russian Constructivism

Development of the Russian avant-garde architecture or the constructivist architecture was tremendously influenced by the movement in painting called Suprematism. Beginning with the Revolution of 1917, Russian Constructivism tried to symbolise the very idea of a revolutionary society. They used light, plane, space, colour, volume along with materials, constructed in a composition. Their preference for inclined planes, dynamic stairs and contrasting geometry, wheels, windmills, unfinished material texture, of black and red components came from the paintings of Kandinsky (fig 20). Constructivist architecture tried to fuse the abstract art with the articulation of functional and mechanically moving parts. Sant Elia worked with images of a new architecture made of light materials, with elevators snaking up and down, or ramps and stairs crisscrossing the interior space (fig 21a). Lissitzky's paintings 'Beat the whites with the Red Wedge' is simplified suprematist forms and spatial concept. Lissitzky's 'Lenin Tribune' design of 1920, a collage painting of engineered structure and floating form, was becoming models for a new kind of weightless architecture. Constructivism was an anti traditional art, anti traditional construction movement. Tatlin regarded himself as an artist-engineer. Melnikov's designs were combining in a fresh structuralist manner elements like exposed frame constructing angular roof, spiral stair, grid-fenestration, with horizontal, vertical and diagonal lines juxtaposed together. Architecture was now similar to new and dynamic forms of paintings, and the constructivist architects energies were exclusively devoted to the invention of never-seen-before forms. (fig 21b). Ivan Leonidov's competition entry 'Palace of Culture' most effectively suggest that he was drawing upon the suprematist resource of Malevich as in 'Red Square or Peasant Woman in two dimensions'.<sup>9</sup> These machine-romantic constructivists wanted to provide 'artistic objects for everyone'. The idea of production of art in favour of production of useful objects' exemplified by the two paintings 'Composition' and 'Construction' shows vividly how painting had inspired architecture in this period<sup>10</sup> (fig. 22).

9. Guggenheim Magazine, Guggenheim Museum, NY, Fall 1992, p 24

10. Guggenheim Magazine, p 19

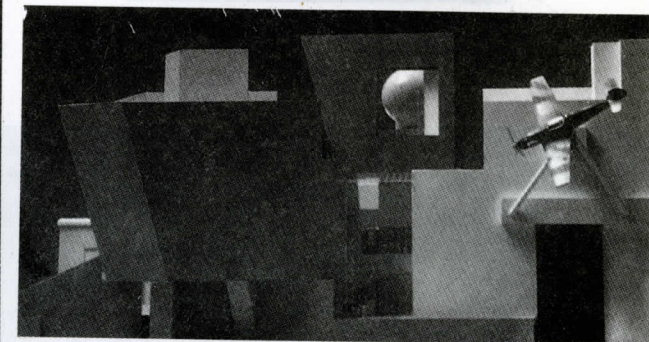
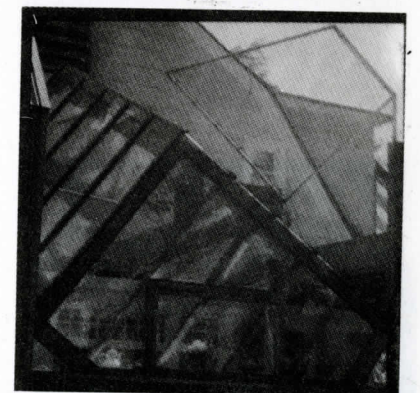
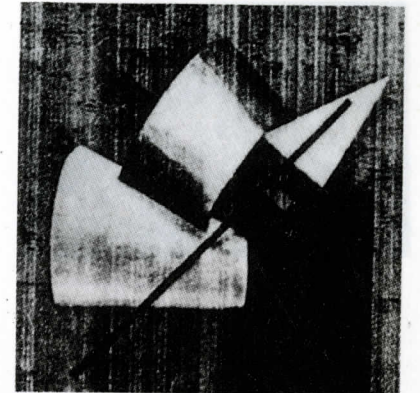




## Deconstructivism

The deconstructivist architects of today are pursuing the unfinished architectural revolution begun by the Russian Constructivists. One such architect is Zaha Hadid whose design process begins with visionary paintings of suprematist-constructivist nature, in which she explores buildings and cities. Her work shows a direct debt to paintings, and sculptures of Malevich and Tatlin.<sup>11</sup> (fig.23). Today's deconstructivists have used work of Russian avant-garde as the starting point of their compositions which can be supported with the examples of works of Chernikov and Hadid. (fig. 24,25). Suprematist scaleless, measureless appearance is being applied by deconstructivists such as Peter Eisenmann or Rem Koolhaas. Bernard Tschumi's Parc de la Villette of 1986 explodes and deconstructs the idea of mechanical construction explored by Chernikov (Fig. 25,26,27).

Similar to the cubist and constructivist paintings, in Frank Gehry's deconstructive building the eye wishes to carry out an acrobatic tour around its walls, roof, and foundations. Here the role of viewer and the viewed are taken as basic criteria. His work give an unexpected visual orchestration by creating unusual effects with variety of material. 'Buildings under construction looks nicer and poetic than buildings finished'- is the underlying idea of his deconstructive architecture<sup>12</sup> On looking at painting Gehry appreciates the immediacy in paintings, as if the brush strokes were just made. Because of his involvement with paintings, he wanted to bring out these qualities to buildings, such as how a building could be made to look like it is in process, and how can the expressive and compositional attitudes of painting be explored in a building. Gehry's keen interest lies in the unfinished quality that is found in paintings by Jackson Pollock, de Kooning, or Cezanne, which give the impression that the paint was just applied<sup>13</sup> (fig.28).

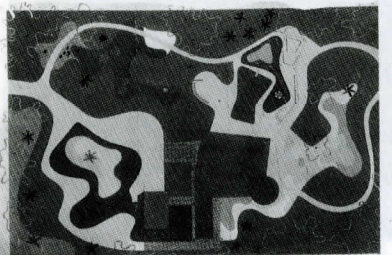
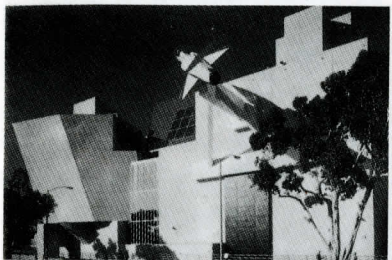
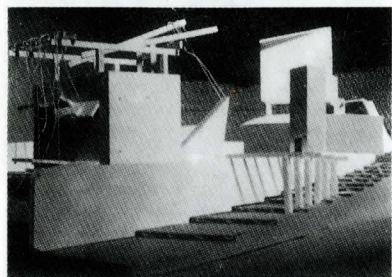


11. Guggenheim Magazine, p 56

12. Arnell, P. and Bickford, T., *Frank Gehry*, Rizzoli Int. Publications, Inc., NY. 1985; p XIII

13. Arnell, P. and Bickford; p 7

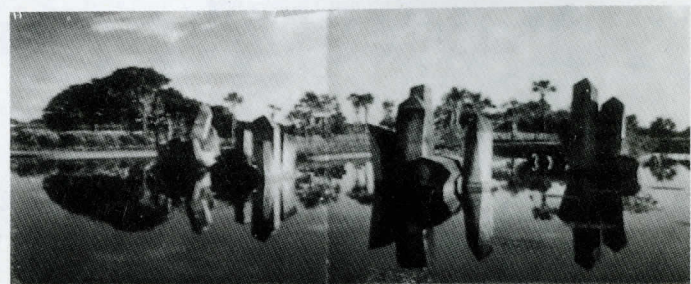
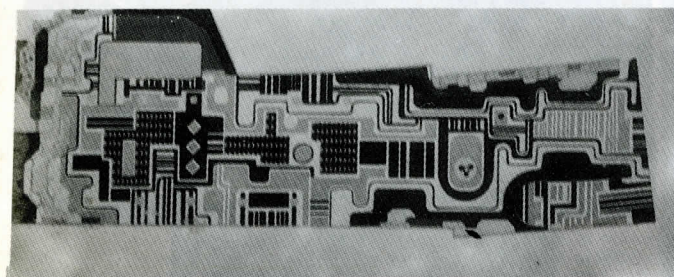
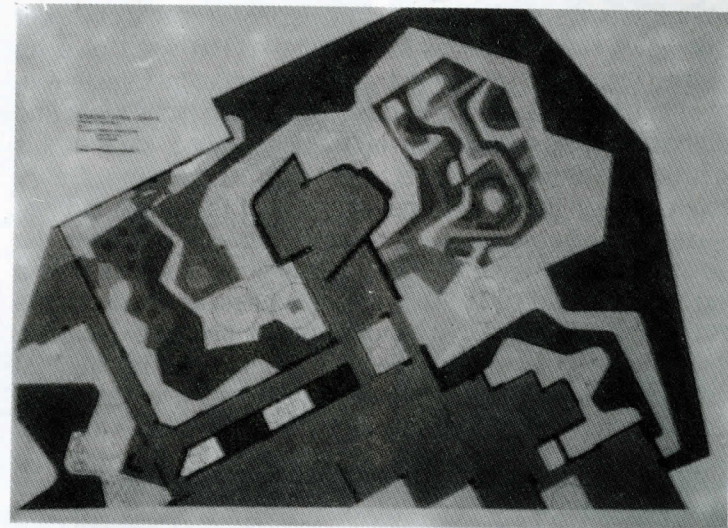




### Landscape architecture

Brazilian painter - landscape designer Roberto Burle Marx has taken landscape design as a serious artistic endeavour. He approaches garden design as an artist, as a painter. His vast knowledge of plants and their life cycles allows him to design mature, organic, three-dimensional composition from the abstract painting.<sup>14</sup> (fig. 29a,b). Burle Marx has been painting with plants some of the most beautiful and meaningful landscape designs of the century. We can find the lyrical qualities of Matisse present in his colourful garden designs. At other times, the sensual painterly line Marx developed in his landscape designs with interlocking forms of planting beds, walks, pools, screen walls reveals his liking for abstract art of Arp, Calder, Miro & Picasso.

So we can say that one painting may tell us stories, another may make us think, but at no time has painting failed to produce spirits to those who were occupied with architectural conceptions. Painting thus will always keep on playing its role as a lyrical element as well



14. Adams, W.H., *Roberto Burle Marx*, New York Museum of Modern Art, 1991; p 21

as a source of inspiration for architects to come.

Fig Number	Name	Architecture
Fig-Title Picture	Painting	
(1)	Stanley Tigerman,	(1) Otto Wagner
(1)	Aldo Rossi,	(1) Aldo Rossi
(1)	Micheal Graves,	(1) Micheal Garves
(2)	G. B. Piranesi	
(3)	Etienne Boullée	
(4)	Sir John Soane	
(5)	Charles Moore	
(6)	Karl F. Schinkel	
(7)	Karl F. Schinkel	
(8)	Frank Lloyd Wright	
(9)	Frank Lloyd Wright	
(10)	Frank Lloyd Wrgtht	
(11)	Frank Lloyd wright	
(12)	Frank Lloyd Wright	
(13)	Piet Mondrian	
(13)	Gerrit Rietveld	
(13)	Theo Van Doesberg	
(14)	(Unknown)	
(15)	Mies Vander Rohe	
(16)	Theo Van Doesberg	
(17)	Pablo Picasso	
(18)	Le Corbusier	
(19)	Le Corbusier	
(19)	Le Corbusier	
(20)	Le Corbusier	
(21a)	EL Lizzitsky	
(21b)	EL Lizzitsky	
(21b)	Vladimir Tatlin	
(22)	Laszlo Moholy -Nagy	
(22)	Teo Van Doesberg	
(22)	Stenberg	
(22)	Wassily Kandinsky	
(23a)	Bernard Tschumi	
(23a)	Melnikov	
(23b)	Zaha Hadid	
(23b)	Malerich	
(24)	Chernikov	
(24)	Zaha Hadid	
(25)	Zaha Hadid	
(26)	Bernard Tschumi	
(27)		
(27)	Frank Gehry	
(28)	Ivan Puni	
(28)	Fank Gehry	
(28)	Frank Gehry	
(28)	Frank Gehry	



(28)	Frank Gehry
(28)	Frank Gehry
29a.	Roberto B. Marx
29b	Roberto B. Marx
29b	Roberto B. Marx
29c	Roberto B. Marx

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